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PROFESSIONAL COMMENT.

THE architect's part in the decoration of a building is a large one, for he must be able to direct personally the subjects and their general proportions and styles. He must be able in designing his building to introduce the various arts for its adornment in places where their introduction will materially assist it. The value of an imposing group of sculpture, the use of other carving, the color schemes and the kind of materials for their production, the value and use of frescoes and the styles and subjects of them, the treatment of glass, all must be under his direction, and he should know how each is to be treated and made one with the architecture of his building. The architect will know that in introducing his group of sculpture the elevation of his building can be enriched or ruined very materially. He will therefore direct the exact scale of figure, a certain line in its composition and the breadth of treatment necessary for its value. The sculpture becomes part and parcel of the architecture, and for that purpose must be architecturally treated; it must have no appearance of being foreign to the general scheme or of something just modeled and placed there irrespective of architectural proportions. Therefore the architect alone can know what is required upon these lines for the adornment of his building.

Like architecture, decoration covers a very wide field—a field which should have a boundary line marked by an architectural wall to prevent decorators straying from within its precincts into unknown spheres. The decorator usually commences his career by serving a term of years at a special craft in which he obtains a thorough technical grounding. As a sculptor he becomes an expert in modeling and carving and is able to execute commissions for figures in various materials, including bronze. His province in this art allows him considerable scope and freedom, but in carrying out his commission too much freedom cannot be allowed, for he would doubtless clash with the architect for whom the figures are being carried out. He will receive general instructions as to scale, breadth of treatment and other views of the architect, all of which are necessary to render his work strictly architectural and to be in harmony with the building. It is the decorator's province to execute the commission on these lines. Experience and efficiency in his own particular material aid him in actually producing the work, and here the architect will not presume to direct. The decorator—if he be a painter—will receive similar directions from the architect, and to him are allotted conditions comprising subject, scale and general scheme of coloring. It is not his province to choose these because he cannot possess another man's individuality and cannot therefore be competent to know the character and style for the decoration such as were originally intended by the architect. In a case where, given a free hand to decorate a Renaissance building, good or bad as it might be, the decorator is very apt for many reasons to go wrong. It may happen that his experiences as a painter of architectural decoration have been mainly confined to the Gothic school, and no matter how skillful he might be as a draughtsman or colorist, the influence of the Gothic is bound to make itself manifest in his work, and even the rudiments of subject, scale and general scheme of coloring in a Renaissance decoration will not be grasped by him, and a poor scheme will result unless he independently seeks the advice of a competent architect. The painter may be a man who prefers to ignore character and style and go for something which is quite the outcome of his own invention and fanciful ideas. Then, provided the building he is to decorate be one which glories

in the beauties of a pure order, and as such is a representative example, the result of his labor is deplorable and the building spoiled. The decorator here who is inexperienced in architecture will do many foolish things and, unwittingly, quite disregard obvious conditions existing in the main and various details in the construction of the building. His own invention of style and fanciful ideas of color and material cannot lend themselves to be in perfect harmony with this beautiful building. Some of the most delicate features in its architecture, characteristic mouldings, valuable flat surfaces—which were probably never intended to receive much, if any, color—will all come in for their share of his paint brush, or be chiseled away to receive some incongruous and foreign material. A free hand in a case of this kind should not come within the province of the decorator, even though his knowledge of and respect for architecture be recognized as experienced. An architect should supervise, but only the united and harmonious endeavors of both will produce true results.

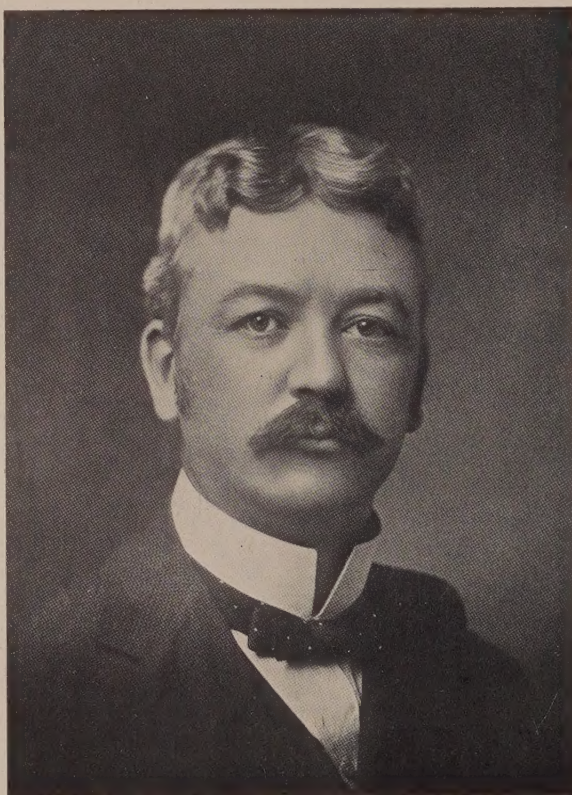
PRACTICAL METHODS AND BUSINESS TRAINING.

J. C. TUCKER.

TWO opposite and conflicting tendencies have always characterized the practice of architecture, the one to keep along the lines of utility and construction, the other to take an independent course in the direction of artistic ideals or æstheticism. Whatever may be the ultimate development of architecture, these two tendencies will continue to exist side by side, and it is perhaps a safeguard that they should. There is a sort of duality in almost everything—science, politics, theology, art itself, have each this nature—two contrary ideas or opinions which are ever making themselves heard. One tendency or view acts as a corrective; it is like action and reaction. To limit our attention to architecture and the allied arts, we have seen many such contradictory views. There was the conflict between the rival camps of Greeks and Goths, known as the “Battle of the Styles,” which though waged with much ardor for a time only, continues to exist in another form between adherents of two very decided schools; then we had the conflict between purists and eclectics, between the champions of honest construction and imitationists, which exhibited itself in various ways in decoration. But perhaps the most fundamental opposition has shown itself between the practical and the artistic sides of the profession, which has always become a bone of contention among architects, and has resulted in the cleavage of the profession into two or more branches. And no doubt the division has been helpful in correcting the tendency to extremes of each party, and so redressing the balance.

The members of the practical school, including men who devote themselves to the technical side of their vocation, who are strong in plan and construction, who know how to write specifications, and who have a practical knowledge of building materials, have been a useful counterbalance to the dreamy school of esthetics, who affect to despise all that is practical and commonplace, who think it a waste of time to teach the pupil much about building sciences, or technical matters, craftsmanship, specifications or quantity taking. Each side has been of value, the one in devoting itself to a part of the profession which is of the most urgent and useful kind, in mastering the details of construction, and in taking off quantities of buildings; the other in preserving traditions of architecture, attributes of art, and the artistic functions of design. They

are correlative. Without the practical elements, architecture would become a mere academical pursuit, and would indulge in visionary ideas; without the latter, it would cease to be art, and become mere building. There has been much clashing and overlapping between these two parts of the profession as they have been practiced, because the practical man has been wont to regard his function as the only real one, and the idealist has in the same way resented the encroachments of the constructor or engineer, not considering that both are co-ordinate parts, and ought to be practiced together. Thus we have seen the engineer and practical builder have often come in conflict with the architect in matters such as bridge-building or large iron structures; the surveyor and quantity taker have also been brought into unpleasant relations with the designer in the conduct of building, and this hostile attitude between the two is still maintained, much to the injury of the profession. The line of demarcation between the builder, the engineer or surveyor, and the architect as a mere artist has thus



Architects of To-Day.

MR. L. C. HOLDEN.

become very distinct; in the United States it is strongly marked, as the existence of the specialist in construction has proved. The separation between construction and art so-called has been going on for a generation or two, and the modern building requirements and equipments have intensified it, for on one side steel construction and mechanical wants have rendered it less possible for the architect to become master of such details; and, on the other, the decorative arts and crafts have gone on increasing. We cannot but deplore this “unhappy division” in the ranks of the profession, and the only hope for co-ordinating into the one harmonious system the various elements and efforts is for the professions to master the divergent relations that exist between them, and try to bring them into agreement. No attempt of this kind has been made on one side or the other. The engineer is for ever throwing into the teeth

of the architect his ignorance of construction, while the latter still taunts the engineer with his want of artistic discernment for good proportion or beauty. Again, how constantly the practical builder and the sanitary expert and the surveyor reproach the architect with his want of practical and business qualifications. While these mutual recriminations last it will be absurd to look for any *rapprochement*. One method preliminary to a reconciliation is for each party to try and master the questions of the other side—to seek to bring himself into the position of his antagonist—to understand the opposite point of view. To do this there must be less bitterness of attack and criticism, and more study of the engineer's or practical builder's problems—their constructive and technical difficulties. And it appears to us it is for the architectural profession to take the lead; his position as an artist ought to enable him more readily to understand the points of construction, and to show how they can be made to agree with the laws of æsthetics. His very art is to make the useful as beautiful as he can; to take a constructive detail and to make it presentable, if he cannot show another and a better way.

The mere practical builder or engineer has no such compunction; all he attempts to do is to construct in the most direct and economical way, regardless of any unpleasing or awkward effect; and it is this remorseless and unsympathetic attitude of the practical man that has tended to widen the breach, and to make the practical builder so often odious to the sensitive architect. The requirements of the modern twentieth-century building help to increase the importance of the practical man. The artist must necessarily be at a discount in such buildings. The modern office building, is a development of technical building, and it is growing in complexity and completeness. In the latter, the financial aspect, the return upon investment, is all-important to those who build; they want tenants who are willing to pay for conveniences such as heating, electric lighting, elevators, lavatories, telephones, &c. The American citizen, in fact, looks upon these conveniences of modern living as profitable, as saving time and labor, and does not in the least begrudge their cost. The modern office building has indeed been compared to a Pullman car; in both the floor space is contracted, but this is compensated for by the conveniences. In both of these structures the effort is to satisfy all the usual requirements of the occupants with the least waste of time and space. There is very little real scope in such a building for the artistic, except in the way of superficial decorations. The controlling factor in all such buildings is not the architectural design, but the structural and mechanical components. As one writer has pointed out, "The architectural design can be changed almost an infinite number of times without the mechanical engineering essentials being changed at all, and with only such structural changes as may be necessary locally by the changed architectural disposition of the materials." This being so, he shows that the method of putting into the hands of the architect of the facades the general management of all matters of structure and mechanical plant is wrong. In fact, steel skeleton building construction has been defined as engineering work with an architectural accompaniment. To quote again the remarks of this writer: "In order that each of the elements entering into the design as a whole be given proper recognition, and its due value as a factor, the chief designer should be a man capable of judiciously adjusting the claims of each of these elements to precedence. Experience has taught that the man who owes his training to the Art School and its influences cannot, or will not, consider the engineering side of the problem. The men who spell their art with a capital A deplore science as a necessary evil which disturbs

their mental repose, and if not as an evil, then as a bore, which interferes with and places practical obstacles in the way of their flights of fancy. Mathematics and science are looked upon by men of this type as matters of formulæ, rule of thumb, and mechanical routine, a matter to be learned out of a book, &c." The same writer observes that men of this type look upon themselves as the only rightful possessors of imagination; they have no conception of the trained imagination required to comprehend the higher mathematics; therefore he concludes the graduate of the Art School, whose training has been given up to the study of appearances, the balancing of solid and openings, play of light and shadow, is unable to judge of problems which deal with realities, or to control the structural and mechanical parts of the building. But he also points out another type of mind unsuited for the position of designer-in-chief, that which has no appreciation of art and beauty, and which has no other "measures than those of economy and efficiency." This class of mind, as he says, often "misses the best solution," by the narrow view it takes of building.

We have not to go far to observe the cheeseparating practical man, either as a client or a builder. He objects to the slightest expense on what the architect would think legitimate detail; he would put in the plainest of square sash windows instead of a semi-circular or pointed one; tracery and mouldings he would consider waste—an 9-inch wall, to his view, is as good as a 14-inch one; he would cut down the specifications and quantities to the barest necessities. Such a mind is under the impression that all that he cannot see the value of must be useless and extravagant; but, of course, this point of view will always depend on the competence and qualification of the person to judge what is necessary and what not. A practical builder who has been trained in a carpenter's shop may find it hard to understand why an architect should prefer small squares and thick sash bars, or give to his frame a shape and solidity or detail of moulding which adds to the labor and cost; why he should prefer "stuck," solid, or worked-on mouldings to "planted" mouldings in doors and frames. He may protest against any moulded brickwork or terracotta, or any panelled ceilings; his views being restricted to one trade, he does not enter into the details of any other, or inquire their meaning. So it is always with men versed in one trade; they live in a narrow circle of their own, and it is hard to make them understand anything beyond it. The practical man is often exceedingly conservative. He has been so long in one groove that to get out of it and try another is exceedingly distasteful to him. Every architect is aware of the many excuses a carpenter or joiner, or a bricklayer or other tradesman will make to try and get out of doing a thing in a new or fresh way. He will say it is not practical; that it will waste more material, or will cost a good deal more. The contractor or his foreman will try his best to induce the architect to abandon his design and adopt something easier. It is the rule-of-thumb method that suits him; it is easier and cheaper. Thus the practical man is apt to shut his eyes to everything that is new or difficult; he has a keen sense of labor-saving. In saying this we do not wish to extenuate the vagaries and useless labor so often seen in architectural designs, partly from a wish to appear original, or according to the crochets of the New Art cult, so aimless and fond of extravagant detail. There are imitations which both the disciples of the "New Art" and the "New Craftwork" must observe; not that the practical tradesman is anything of a new craftsman in his nature; he is too conservative for that, and is fond of showing off his skill, while the

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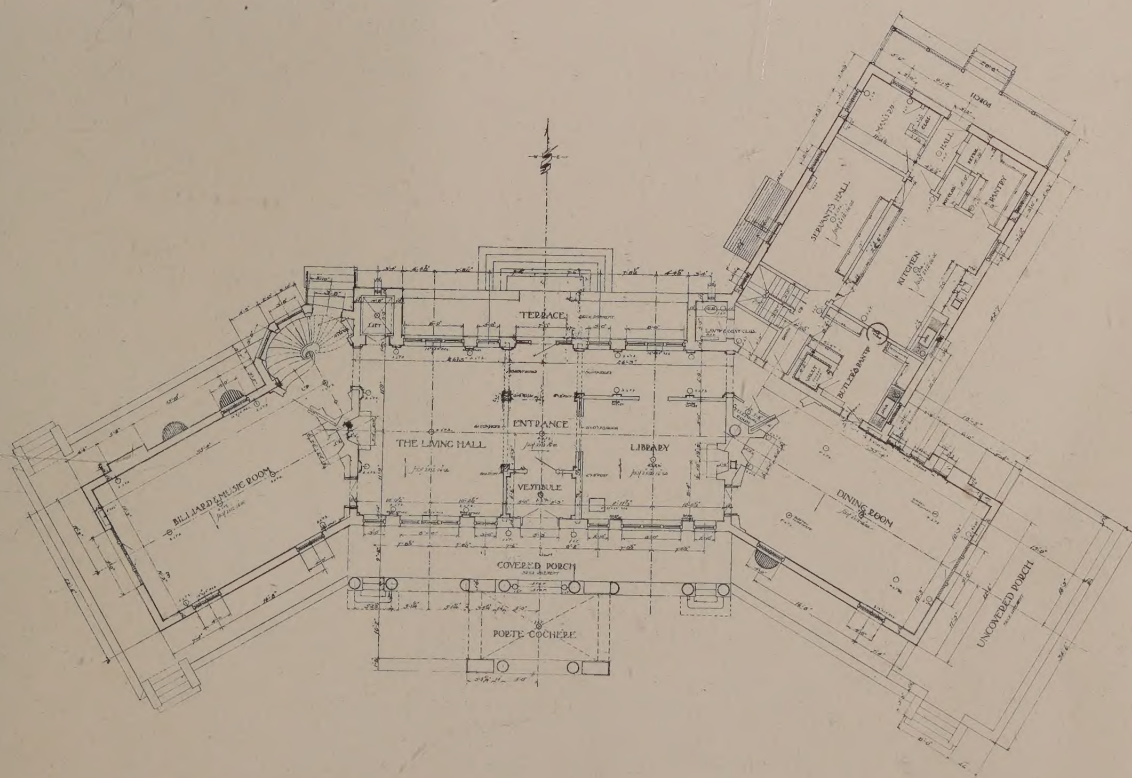
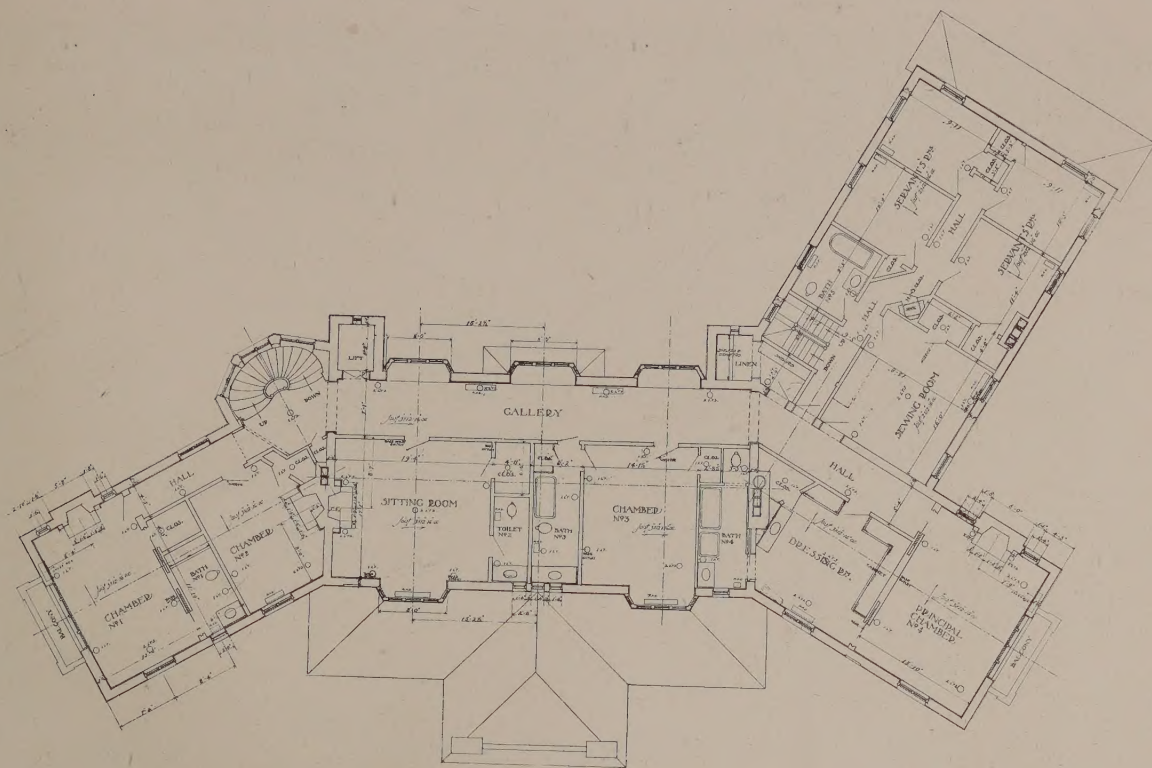


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COUNTRY HOUSE, MRS. R. P. LINCOLN, PLAINFIELD, N. J.

Tracy & Swartwout, Architects. Wurts Bros., Photo.

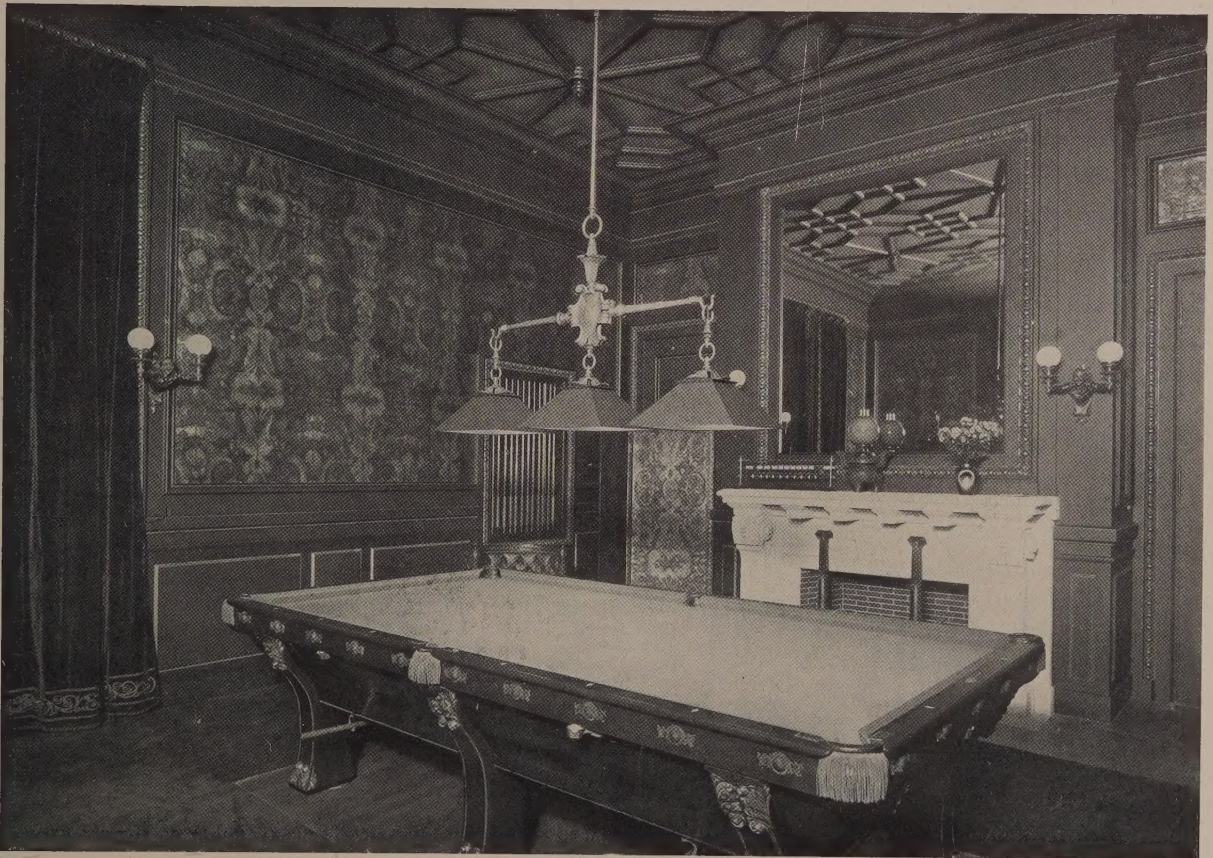


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LIVING ROOM AND DINING ROOM, "BLAIRSDEN," COUNTRY HOUSE, C. LEDYARD BLAIR, FAR HILLS, N. J.
Carrere & Hastings, Architects. Charles Henry Cottrell, Interior Decorator. Copyright, 1903, Wurts Bros. Photo.



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The Organ in the studio of Mr. A. A. Anderson, shown in the illustration opposite, is an Aeolian Pipe Organ.

(Continued from page 151.)

new craftsman is inclined to be offensively rough and primitive in his methods.

There are some ways in which the practical tendency is detrimental to the architect. While it fastens on some details, it quite misses the main point of the design. A great deal of care and attention is bestowed on the materials to be used, the specification requirements, the sanitary fittings, but the main consideration of the design, a well thought out and convenient plan, is neglected. A great deal of attention and trouble are taken to secure good construction and details in the brick work or the iron work, while a poor plan has been allowed to pass. It is not uncommon to find an important point of arrangement or construction neglected to make way for some piping or a lift which the practical man considers essential. This is a reason why in all large buildings the floor plans and structural details and heating arrangements should be studied at the same time and by the same mind, or by the engineer and architect working in harmony. In fact, the design may be spoiled by the exceedingly practical attention given to some detail at the cost of efficiency in the whole design.

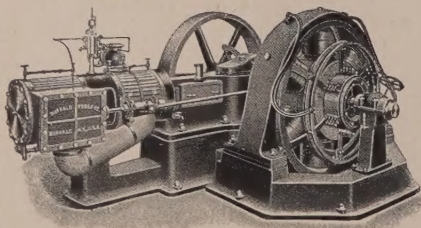
A practical builder does not as a rule forget anything; but he is in the habit of doing things mechanically without thinking of the general result. Being cast in very different moulds, the practical builder and the architect cannot always understand or agree with one another. How difficult it is for them to see things eye for eye. The builder whose notions of design are of a very different kind to those of the designer cannot be made to understand or appreciate those little details which count for much in the architect's view. Take as an instance, the plan of cut or gauged brickwork, in which small inch breaks occur at each window. Undervaluing these small variations from a straight wall, he builds them as a straight, and his excuse is, perhaps, that such small breaks would not be seen or of any value; or he omits, or persuades the architect to omit, a little change of plan or section in the details of a turret, or a chimney stack, or a cornice. We do not doubt that he does so unintentionally as to cost or labor in some cases, merely because he will not give himself the trouble to understand the detail drawing; though often, no doubt, self-interest in saving labor is the true motive. He will, in this way, omit a moulding or a row of dentils in a cornice. But the inability to read the architect's drawings aright is one of the awkward results of a training in workshops where the eye has been neglected, and where drawing is not made a special subject of study. The practical craftsman is, as a rule, a

rule-of-thumb man; he can understand a plan or a section when he sees it set out on the work, but on paper to a smaller scale he is unable to grasp the meaning of so many lines. Geometrical projection is not yet one of the essentials of the workman. Nor, on the other hand, can the architect afford to neglect the practical and business methods of the age. The Stevens Institute of Technology has lately established a course of lectures on business methods by which the young engineer may acquire a knowledge of commercial practice, bookkeeping, and instruction in the law of contracts for the engineer's work ought to be in accord with commercial principles. The engineer or architect ought to be able to carefully discriminate between the charges to capital or revenue and the provision for depreciation of plant. In the purchase of properties or businesses the architect and surveyor must be competent in these matters just as the engineer, when called upon to value a new process or apparatus, should be able to examine the books of accounts. The subject of quantities is a threadworn topic; yet it is so closely connected with building that an architect can scarcely be said to have learned the fundamentals of his business till he is able to measure up work and value it, at least in a general manner. An architect with a mastery of figures and elementary rules of calculation has a very decided advantage over a designer pure and simple, as he is able to modify and restrict his design by the knowledge of cost which he has learned. To be practically acquainted with approximate estimating by schedules of prices, cost per foot cube, per square, or per unit of accommodation, a knowledge of standard rates of wages, provisional sums for certain things, like electric lighting, the p. c. prices for fittings, and so on, is to have a grasp of building which gives its possessor considerable advantage over the training of the art school.

BOOK REVIEWS.

HOW TO JUDGE ARCHITECTURE. Russell Sturgis. 1903. \$1.50. The Baker & Taylor Co., New York.

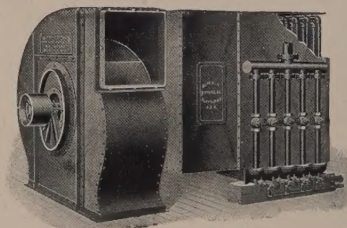
This work denotes a careful research and consideration of relative principles and properties which shall determine when architecture is good and when it is bad. It is a statement of the numerous conditions of ecclesiastical, political and civic society which left their impress upon the structures of many peoples and ages. It shows how the predominating power sometimes rested in the designer and again in the builder. There are noted many requirements which called for change and modification, or elaboration of the original and perfect Greek forms; and the inspirations of those notable structures in which are perpetuated the characteristics which lead us to a fair judgment of architecture.



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